



www.mi.gov/newbornscreening

Michigan Resources & Support

**Children's Hospital of Michigan
Metabolic Clinic**
Toll-free: 1-866-44CHMMC

**Children's Special Health
Care Services**
Family Phone Line
Toll-free: 1-800-359-3722

Early On® Michigan
Toll-free: 1-800-EARLY ON
www.1800earlyon.org

Michigan Genetics Connection
www.migeneticsconnection.org

Michigan Newborn Screening
Follow-up Coordinator
Toll-free: 1-866-673-9939
E-mail: MDCH-newbornscreening @
michigan.gov

Michigan NBS Parent Liaison
Toll-free: 1-866-673-9939
E-mail: NBS-parent@michigan.gov

National Resources & Support

ASA Kids
www.asakids.org

Family Village
www.familyvillage.wisc.edu

GeneReviews
www.genetests.org

Genetic Alliance
www.geneticalliance.org

**National Urea Cycle Disorders
Foundation**
Toll-Free: 1-800-386-8233
www.nucdf.org

STAR-G Project
[www.newbornscreening.info/Parents/
facts.html](http://www.newbornscreening.info/Parents/facts.html)

What are Citrullinemia and Argininosuccinic Acidemia (ASA)?

Citrullinemia and ASA are inherited, urea cycle disorders that result when a baby's body cannot remove certain waste products from the blood. These disorders occur in about 1 in 250,000 newborns. Without treatment, progressive brain damage and death occur.

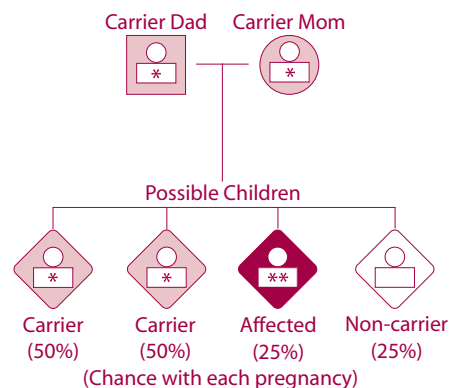
How may Citrullinemia and ASA affect my child?

Babies with citrullinemia and ASA cannot process ammonia, a by-product of the proteins we eat, into a harmless product called urea. This causes ammonia to build up in their blood. High levels of ammonia are toxic (poisonous) and cause the symptoms of citrullinemia and ASA. These symptoms in babies include:

- Loss of appetite
- Vomiting
- Listlessness (Loss of energy/movement)
- Seizures

How do Citrullinemia and ASA occur?

Citrullinemia and ASA are genetic disorders. Parents of an affected child carry a genetic trait causing citrullinemia or ASA. Both parents pass the trait to an affected child. There is a 1 in 4 chance that each child will have citrullinemia when both parents carry the trait for the disease. There is a 1 in 4 chance that each child will have ASA when both parents carry the trait for the disease.



How are Citrullinemia and ASA treated?

Newborns are placed on a special formula to restrict protein. Certain supplements and medicines may be given. Kidney dialysis may be needed for some children. The Metabolic Clinic and your pediatrician will help you begin and keep your child on a diet that meets his or her metabolic needs.

**For more information contact the Newborn Screening Program
toll-free at 1-866-673-9939 or e-mail NBS-Parent@michigan.gov**

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